

In the Claims

The listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-7 (cancelled)

8. (new) A pump system for use in a hydrocarbon well, comprising:
- a pump capable of being immersed in a hydrocarbon well;
 - an electrical supply source providing electrical power to the pump when immersed in the well; and
 - a flow meter associated with the pump when immersed in the well; wherein said flow meter comprises an electromagnetic flow meter which is supplied with electrical power from the electrical supply source.
9. (new) The system as claimed in claim 8, further comprising production tubing extending from the bottom of the well to a well head, the pump being carried on the production tubing.
10. (new) The system as claimed in claim 9, further comprising surface tubing positioned outside the well and connected to the production tubing, the electromagnetic flow-meter being carried on the surface tubing.
11. (new) The system as claimed in claim 8, wherein the pump comprises a submersible pump driven by an electric motor.
12. (new) The system as claimed in claim 8, wherein the electric supply source is positioned at the surface and is capable of delivering a power of between 100 and 1000 kW, and a current of between approximately 10 and 100 A.
13. (new) The system as claimed in claim 8, wherein the pump and the electromagnetic flow-meter are connected in series.

14. (new) The system as claimed in claim 8, further comprising a system of inductive coupling capable of generating currents of different frequencies in the electromagnetic flow-meter and the pump.